

**BY ORDER OF THE COMMANDER
445TH AIRLIFT WING**

**445TH AIRLIFT WING INSTRUCTION
21-107**



17 AUGUST 2009

Maintenance

**CRASH, DAMAGED OR DISABLED
AIRCRAFT RECOVERY (CDDAR)**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements Air Force Policy Directive (AFPD) 21-1, *Air and Space Maintenance*. This instruction extends the guidance of Air Force Instruction (AFI) 21-101, *Aircraft and Equipment Maintenance Management*. This instruction standardizes procedures for implementing the Crash, Damaged, or Disabled Aircraft Recovery (CDDAR) program. This instruction is applicable to all personnel assigned to the 445th Airlift Wing (445 AW). Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the Air Force Form 847, *Recommendation for Change of Publication*; route AF Form 847's from the field through the appropriate functional's chain of command. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363 *Management of Records*, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) located at <https://www.my.af.mil/gcss-af61a/afrims/afrims>.

SUMMARY OF CHANGES

This revision has been substantially revised and must be completely reviewed.

1. General.

1.1. The CDDAR program is designed to recover crashed, damaged or disabled aircraft in a minimum time. Requirements will consist of opening runways for operational use, prevention of secondary damage to the aircraft, and preservation of evidence for mishap or accident investigation.

1.2. The CDDAR program instruction is a procedural guide and will not take precedence over aircraft specific technical data in the recovery of crashed, damaged or disabled aircraft.

2. CDDAR Responsibilities.

2.1. The 445 AW will provide crash recovery support for assigned aircraft and will support 88 Mission Support Group/Logistic Readiness Squadron (MSG/LRS) CDDAR program IAW WRIGHT-PATTERSON AIR FORCE BASE INSTRUCTION 21-101, *CDDAR*. CDDAR procedures will be coordinated with the Fire Department, Safety, Civilian Engineers, Readiness, Explosive Ordnance Disposal, Bioenvironmental, Airfield Manager, and on/off base agencies as needed IAW AFMAN 32-4004, *Emergency Response Operations*. The 445 AW will support aircraft Safety Investigation Boards (SIB) IAW WRIGHT-PATTERSON AIR FORCE BASE Plan 91-204, *Aircraft Mishap Investigation*, to include providing space in hangars as available for preservation of accident debris and providing Operations/Maintenance advisors to the CDDAR On-Scene Commander (OSC) when Air Force Reserve Command (AFRC) resources are involved. When 445 AW personnel or assets are involved, the 445 AW will provide a minimum of two members to the interim SIB.

2.2. 445th Maintenance Group (MXG) Quality Assurance (MGQ) will ensure all aircraft AIR FORCE TECHNICAL ORDER (AFTO) Form 781, *ARMS Aircrew/Mission Flight Data Document*; documentation/historical records, servicing equipment, personnel training records, and Maintenance Information System (MIS or GO81) utilizing the 9012 screen (Lock/Unlock Aircraft Database) and all E-tools are impounded upon notification of an accident/mishap. MGQ will serve as the central point of coordination between the CDDAR Team Chief and the SIB regarding assigned aircraft.

2.3. The 445th Maintenance Squadron (MXS) Aerospace Repair Supervisor (MXMTA) will serve as the CDDAR Team Chief and the 445 MXS Lead and Subject Matter Expert for assigned aircraft. In the event the Team Chief is unavailable the 445 MXS Maintenance Flight Chief (MXMT) will assume this responsibility. The team composition (see Attachment 2) will respond to the site at the direction of the 445 MXS CDDAR Team Chief. Responsibilities will include providing technical expertise, technical data, Mission Design Series (MDS) unique tools/special equipment, and airframe/system familiarization, as required. The 445 MXS CDDAR Team Chief will maintain a current list of team members and their special qualifications for vehicles, aircraft special certifications, and a list of support equipment and tools by location. Additionally, a listing of 445 MXG personnel qualified to operate buses, tractor trailers, forklifts; etc will be maintained by the CDDAR Team Chief. These lists will be maintained in the 445 MXS CDDAR Team Chief's CDDAR binder located in the 445 MXS Aerospace Repair Shop.

2.4. The 445 MXS Aerospace Repair CDDAR Team Chief will develop an emergency recall/mobilization roster identifying recovery team members for contact during non-duty hours. A copy of the recall/mobilization roster will be on file in the 445 Maintenance Operations Center (MOC) to be utilized in the event an accident/mishap would occur during non-duty hours.

2.5. Training will be accomplished by attending a certified CDDAR course for primary team members, certificate of completion will be filed with 445 MXS CDDAR Team Chief. Primary team members will be qualified in basic crash/damaged aircraft recovery operations. Augmentee members of various specialties will be given familiarization training of CDDAR

equipment by 445 CDDAR primary team members. Augmentee's will always be under direct supervision of a primary member during recovery operation. This training will include indoctrination as to the necessity and importance of preserving all components of the wreckage whenever possible IAW AFI 91-204, *Safety Investigations and Reports*. All training will be documented using AF IMT 797, *Job Qualification Standard Continuation/Command IQS*, and GO81 course ACFT 000100, *Crash Recovery Procedures*, IAW AFI 21-101, *Aircraft and Equipment Maintenance Management* and AFI 36-2201, V3, *Air Force Training Program On The Job Training Administration*.

2.6. The 445 MXS Aerospace Repair CDDAR Team Chief will be responsible for reviewing and providing inputs to support agreements and base disaster response plans annually.

2.7. 445 MXS CDDAR Team Chief will coordinate with the MGQ weight and balance manager when weight and balance/center of gravity conditions for the subject aircraft are unknown.

3. Procedures.

3.1. The 445 AW Command Post (445 AW/CP) or Supervisor of Flying (SOF) will be notified via the base crash net of aircraft accidents/mishaps. All accident/mishap procedures will be IAW WPAFB CEM Plan 10-2, *Comprehensive Emergency Management Plan*, and WPAFB OPERATION PLAN 91-204, *Aircraft Mishap Investigation Plan*. A request or notification for 445th Airlift Wing assistance will come to the 445 AW/CP from the 88 MSG/LGR or the CDDAR On Scene Commander for aircraft accident/mishaps. The 445 AW/CP will inquire as to the assistance required (e.g., flare safety, landing gear safety, technical assistance, or other requested items and the response reporting location and area specific requirements). The 445 AW/CP will immediately notify the 445 MOC of the aircraft incident/accident and provide information/guidance of any requests or notification for assistance from the 445 MXS CDDAR Team.

3.2. Upon notification of an aircraft accident/mishap, the 445 MOC will immediately notify the 445 MXS CDDAR Team Chief and inform the 445th Maintenance Group Commander (MXG/CC), 445th Aircraft Maintenance Squadron Commander (AMXS/CC), 445th Maintenance Squadron Commander (MXS/CC), 445 Maintenance Operations Squadron Commander (MOS/CC), and their Superintendents, the Quality Assurance office and the 445 AMXS Production Superintendent. The 445 MOC will initiate local check sheets 3-1 (Aircraft Accident/Mishap) and 3-14 (Crash Recovery). All radio nets will be notified of the aircraft accident/mishap. Aircraft identification, personnel involved and possible reasons for accident/mishap will not be discussed utilizing radio nets. The 445 MOC and the 445 MXS CDDAR Team will utilize "C" net during these responses to reduce radio traffic.

3.3. When notified by 445 MOC, the 445 MXS CDDAR Team Chief will begin the notification process to assemble the 445 MXS CDDAR Team members. During normal duty hours all personnel will respond immediately to Hangar 4015, 445 MXS Aerospace Repair Shop. During non-duty hours all CDDAR team members will respond within one-hour of notification. The 445 MXS CDDAR Team Chief may request additional support of other 445 MXG maintenance personnel for other than actual aircraft recovery by contacting the 445 MOC.

3.4. Upon arrival the 445 MXS CDDAR Team Chief and/or team, will coordinate with the CDDAR OSC and assist as directed with all crash recovery or disabled aircraft actions required for providing technical assistance and/or other support needed. The 445 MXS CDDAR Team Chief will provide updates to the 445 MOC as warranted or directed on all crash recovery or disabled aircraft actions.

4. Equipment .

4.1. Available recovery equipment will be coordinated by the 88 MSG/LRS and the 445 MXS CDDAR Team.

4.2. Additional support may be requested through higher headquarters, Air Force Material Command (AFMC) or Air Force Reserve Command (AFRC).

4.3. The 88 MSG/LRS will establish Contingency Contracts for local purchase of additional dunnage/shoring and any heavy equipment not readily available at the WPAFB 88 Civil Engineering Squadron such as cranes, bulldozers, backhoes, or front end loader tractors IAW WPAFBI 21-101, *CDDAR*.

4.4. Available equipment lists of both the 88 ABW and the 445 AW will be maintained in the 445 MXS CDDAR Team Chief's binder at the 445 MXS Aerospace Repair Office.

4.5. The 445 MXG may work to establish support agreements with other nearby Air Force bases for mutual support of CDDAR equipment.

5. Personal Protective Equipment (PPE).

5.1. Personal protective equipment will be utilized as determined by the CDDAR OSC and the on-scene Bioenvironmental Engineering representative. All additional PPE concerns and training will be addressed and accomplished prior to beginning recovery operation as determined by bioenvironmental representatives. However, all CDDAR Primary Team members will be respirator qualified.

6. Adopted Forms.

AF IMT 797, *Job Qualification Standard Continuation/Command JQS*

AF Form 847, *Recommendation for Change of Publication*

AFTO Form 781, *ARMS Aircrew/Mission Flight Data Document*

STEPHEN D. GOEMAN, Col, USAFR
Commander

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFPD 21-1, *Air and Space Maintenance* (25 February 2003)

AFI 21-101, *Aircraft and Equipment Maintenance Management* (29 January 2006)

AFI 36-2201 V3, *Air Force Training Program On The Job Training Administration* (4 February 2005)

AFI 91-204, *Safety Investigations and Reports* (24 September 2008)

AFMAN 32-4004, *Emergency Response Operations* (1 December 1995)

AFMAN 33-363, *Management of Records* (1 March 2008)

WPAFB CEM Plan 10-2, *Comprehensive Emergency Management Plan* (1 December 2007)

WPAFB OPLAN 91-204, *Aircraft Mishap Investigation* (1 March 2009)

445 AW PLAN 91-204, *Aircraft Mishap Response and Investigation Plan* (1 October 2007)

WPAFBI 21-101, *Crash Damage Disabled Aircraft Recovery (CDDAR)*, (1 March 2009)

Attachment 2

**445 MXS CRASH DAMAGE DISABLED AIRCRAFT RECOVERY (CDDAR) TEAM
COMPOSITION**

Table A2.1. 445 MXS Crash Damage Disabled Aircraft Recovery (CDDAR) Team Composition.

<u>POSITION</u>	<u>AFSC</u>	<u>NUMBER</u>
Team Chief	2A590/2A571	1
Primary Team	2A5XX/2A6XX/2A7XX	5 – 10
Augmentee's	2A5X1 APG/AERO	5 – 10
	2A5X3B CNAV	1 - 2
	2A5X3A AGCS	1 - 2
	2A6X1 JET	1 – 2
	2A6X2 AGE	1 – 2
	2A6X4 FUEL	1 – 2
	2A6X5 PNEU	1 – 2
	2A6X6 ELEN	1 – 2
	2A7X3 STRU	1 - 2